ABSTRACT

Apparatus and methods for de-screening an image signal utilizing a bank of filters to provide several increasingly blurred versions of the original image signal is disclosed. At any given time, one or more of the blurred versions are created, on a pixel-by-pixel basis. The outputs from a selected pair of blurred signals are then blended together to create a variable blending output that can vary smoothly from no blurring to maximum blurring in a smooth and continuous manner. In addition, the apparatus and methods provide enhanced text and line art by using a variable un-sharp masking mechanism with independent post-blur sharpening control, and detect and enhance neutral (no-color) output pixels.